

**IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1           1-81. (Canceled)

1           82. (New) A method for providing printer recognition and management of a print  
2       job entity, comprising:

3           establishing a repository of attributes and status information associated with each  
4       print job that passes through a printer system;  
5           providing an interface to a plurality of components to allow access to the attributes  
6       and status information in the repository by the plurality of components; and  
7           establishing a job monitor for managing the repository of attributes and status  
8       information associated with each print job, for responding to a call by a printer component  
9       and for managing interactions between printer components in order to control the processing  
10      of the job.

1           83. (New) An apparatus for providing printer recognition and management of a  
2       print job entity, comprising:

3           a repository of attributes and status information associated with each print job that  
4       passes through a printer system;  
5           an interface to a plurality of components, the interface providing access to the  
6       attributes and status information in the repository by the plurality of components; and  
7       a job monitor for managing the repository of attributes and status information associated with  
8       each print job, for responding to a call by a printer component and for managing interactions  
9       between printer components in order to control the processing of the job. . .

1           84. (New) The apparatus of claim 83, wherein the interface provides an ability for  
2       components to process a job according to requirements of the component and reports job  
3       attributes and processing status of the job for common access by other components.

1           85. (New) The apparatus of claim 83, wherein the interface provides a component  
2       access to common variables, the components presenting job attributes or status to the  
3       interface.

1           86. (New) The apparatus of claim 83, wherein the a repository and interface are  
2       provided by a job monitor, the job monitor further providing logical views to obtain a next  
3       job to be processed by a component and to obtain a list of all jobs in the order that they are  
4       processed.

1           87. (New) The apparatus of claim 83, wherein the job monitor is used to update  
2       attributes of print jobs.

1           88. (New) The apparatus of claim 87, wherein the job monitor determines a next  
2       job to process, the component determining valid states for a call.

1           89. (New) The apparatus of claim 87, wherein the job monitor includes a  
2       multiplexor, and wherein the valid states for a multiplexer further comprise:  
3                 an unknown state for when a job identification is requested; and  
4                 a pull print queue state for the job when the job is stop-flowed at a port connection  
5       manager waiting for access to the printer because a print engine is processing another job;  
6                 wherein the multiplexer receives the job and selects to place the job in a job must be  
7       spooled state, a may spool state or must print state.

1           90. (New) The apparatus of claim 89, wherein the multiplexer routes the  
2       incoming job to the print engine or the spooler according to which becomes available first  
3       when the job is a job that may spool.

1           91. (New) The apparatus of claim 83 further comprising a spooler.

1           92. (New) The apparatus of claim 91, wherein the spooler receiving a job  
2       identification request, enters a not spooled state when the spooler has not yet processed the  
3       job, enters a spooling, can despool state when the job is being written to the spool device  
4       thereby allowing the job to be selected for despooing at any time, enters a spooling,  
5       despooling state when the job is being written to the spool device and is also being read from  
6       the spool device, enters a waiting to despool state when the end of the job has been received,  
7       enters a despooing state when the job is being read from the spool device and written to the  
8       multiplexer and enters the done state when the job is finished being processed by the spooler.

1        93. (New) The apparatus of claim 83 further comprising an interpreter.

1        94. (New) The apparatus of claim 93, wherein the interpreter enters a waiting for  
2        data state when job processing by the interpreter has started, enters an interpreting state when  
3        the job is being processed by the interpreter and enters a done state when the job is finished  
4        being processed by the interpreter.

1        95. (New) The apparatus of claim 83, wherein the a repository and interface are  
2        provided by a job monitor, the job monitor further handling incoming jobs with a port  
3        connection manager, wherein the port connection manager calls to a multiplexer to process  
4        the job.

1        96. (New) The apparatus of claim 83, wherein the a repository and interface are  
2        provided by a job monitor, the job monitor further deciding whether to assign a job to the  
3        printer, whether to assign a job to a spooler, whether the job must wait for available resources  
4        or whether the job cannot be processed.

1        97. (New) The apparatus of claim 83 further comprising a job monitor to fetch  
2        jobs in an order that is dependent upon the calling component.

1        98. (New) The apparatus of claim 97 further comprising a job monitor for  
2        examining process job states and variables to determine the correct response and to return an  
3        appropriate job identification for a job.

1           99. (New) The apparatus of claim 83 further comprising a job monitor for  
2 providing a common method of accessing the variables associated with a job for the  
3 components.

1           100. (New) An article of manufacture comprising a program storage medium  
2 readable by a computer, the medium tangibly embodying one or more programs of  
3 instructions executable by the computer to perform a method for providing printer  
4 recognition and management of a print job entity, the method comprising:

5                 establishing a repository of attributes and status information associated with each  
6 print job that passes through a printer system;

7                 providing an interface to a plurality of components to allow access to the attributes  
8 and status information in the repository by the plurality of components; and

9                 establishing a job monitor for managing the repository of attributes and status  
10 information associated with each print job, for responding to a call by a printer component  
11 and for managing interactions between printer components in order to control the processing  
12 of the job.